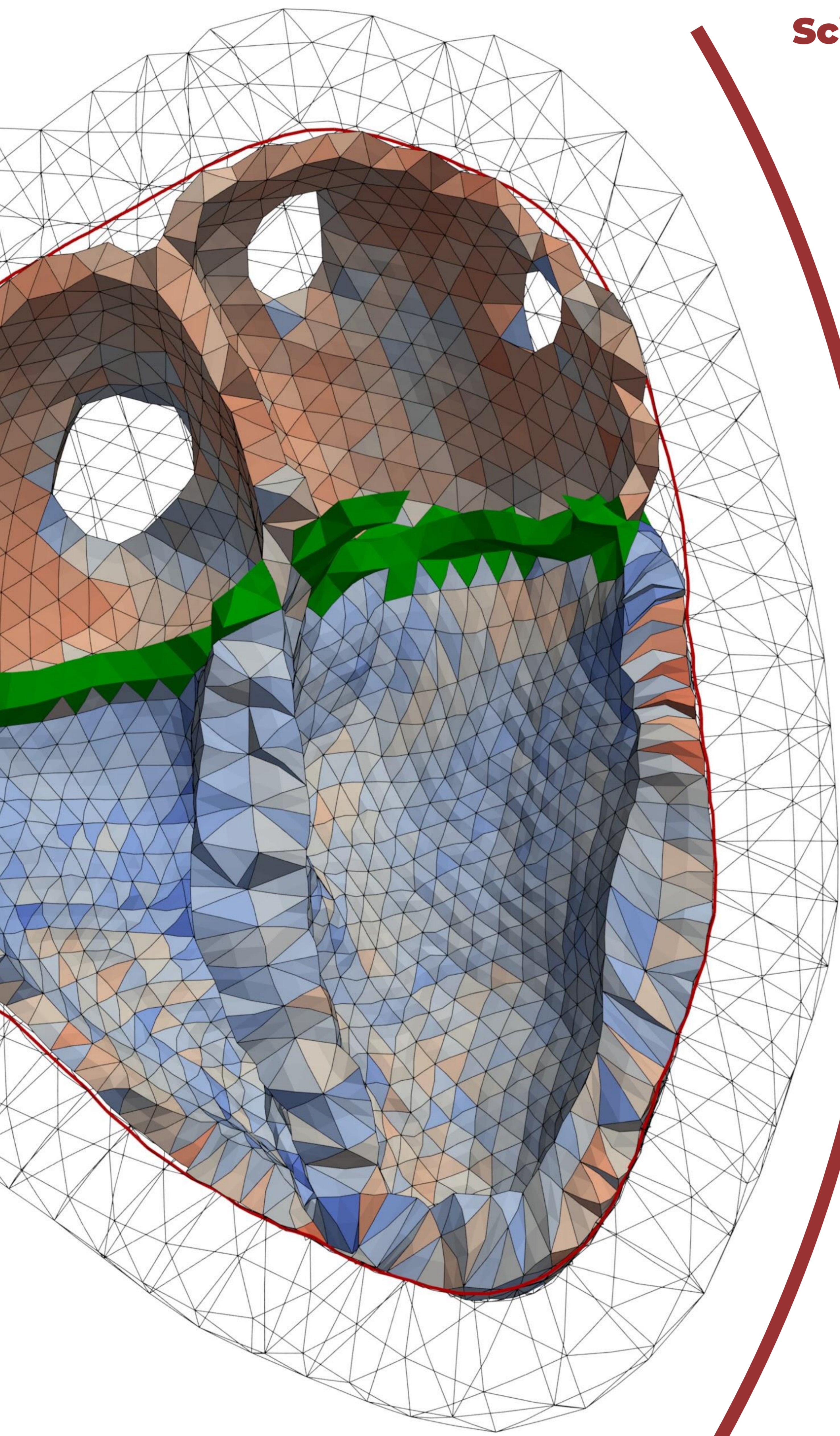


SuLMaSS

Sustainable Lifecycle Management for Scientific Software



Scientific Software

- Provide an open source electrophysiology simulation solution for the wider community
- Computational modeling becomes increasingly important in the cardiac electrophysiology field
- Existing closed-source solution: CARPentry
 - Organically grown in more than 15 years
 - Powerful and flexible but tough learning curve
 - Software architecture requires adaptation to new requirements and focus on user friendliness
 - Release new solution as open source under Apache License

Community

- Lively and active user community
- Training: documentation / video tutorials / user meetings
- Usability & low entry threshold
 - Easy software installation
 - User-friendly GUI
 - Off-the-shelf simulation pipelines (carputils framework)
- Support & community platform
 - Question and answer system
 - GitLab: feature requests, bug tracking and release plans

Quality

- Quality assurance procedures
 - Code review by core developers
 - Continuous, automatic, subject-specific testing
- Test-driven development
 - Modularized, flexible, reusable and extensible code
 - Focussed classes, loose coupling and clean interfaces
- Implementation
 - Google style guide
 - DevOps practices

Infrastructure

- Reusable and citable representation of software, pipelines and data
- Infrastructure for sustainable lifecycle management
 - Community-driven development
 - Software releases with persistent identifiers (PID)
 - User and developer interaction platform
- Archiving for long-term availability

Partners & Networks



Project

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